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REMARKS

The subject application has been carefully considered in view of the Examiner's Action of June 3, 2003. Accordingly Claim 35 is cancelled. Claims 1, 3, 5, 12, 14, 32, 42, 47 and 48 are amended to more particularly point out and distinctly claim the invention. Claims 45 and 46 are amended to correct the dependency of these claims. The remaining claims are resubmitted unamended for the Examiner's further consideration as Applicant considers them to be patentably distinct from the cited and applied prior art.

In addition, the specification has been amended at pages 13 and 17 to delete reference to the numeral "60" and to change the numeral "94" to "44". It is believed that the amendments to the specification resolve the objections to the drawings so that no drawing corrections are needed.

1. The present invention concerns a milking system apparatus and method. In brief, the invention has individual milking stalls arranged along an operator pit. An animal to be milked is backed rearward (tail first) into its milking stall through an ingress/egress gate at an end of the stall so the rear of the animal is adjacent the operator pit. After milking the animal is removed from the milking stall in a forward direction through the same ingress/egress gate into a released area. The stalls and released area are arranged so that the exit path from each stall into the released area is unique. In this way the animals do not have to cross paths or follow along the path of an animal in a neighboring stall when moving from the milking stall into the released area. For example, as described in the specification, the released area is common to all the milking stalls so an animal enters the released area directly as it moves out of the stall.

In a preferred embodiment, the animals are loaded into each stall from a cart. In this respect an animal first walks onto a cart. The cart then translates along the row of milking stalls to an empty stall. The animal then is backed rearward (tail first) from the cart and into the stall through the ingress/egress end of the stall. The cart then translates away from the stall so that after milking the animal exits in a forward direction directly into the released area.

2. Claims 1-3, 8, 9 and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Nelson (US 5, 203, 280). For a rejection under 35 U.S.C. 102(b) to stand, each element of the claim(s) must be found in a single reference. Applicant urges this is not the case here.

Nelson discloses a milking system wherein the animals enter a gate (58) and walk single file along a cow stand (14) where they are positioned side-by-side. After the animals are in position they are urged rearward on the cow stand to position and hold them against a rail 16 for milking. After milking, the animals are urged in a forward direction away from the rail.

The amendments to Claim 1 traverse the rejection. In particular, Claim 1 now specifies that both the rearward loading and the forward unloading of the animal is through the same "ingress/egress end of the stall". In contrast, Nelson discloses a method having the animals all entering through a common entrance (58) that is remote from locations where the animals exit the cow stand.

The rejection to Claims 2, 3, 8, 9 and 11 should be traversed for the same reasons as noted above. In addition, the reference does not show rearwardly loading an animal into a milking stall by passing it "through an ingress/egress gate located at the ingress/egress end of the stall" as set out in Claim 3. Nor does the Nelson arrangement allow for the simultaneous loading of animals as set out in Claim 11 in that the single file entry of Nelson only permits a sequential loading of the animals into the side-by-side milking stalls.

3. Claims 32, 33, 35-38, 41-45, 47 and 48 are rejected under 35 U.S.C. 102 (b) as being anticipated by Waybright (US 5, 483, 921).

Waybright discloses a milking system wherein the animals walk from a holding pen on to a car (22) head first. The car then moves in a defined path (segment 21) and in transit passes a plurality of aligned stations (26, 28, 30). At the end of the path is a milking station (32) where the car is stopped to permit the milking of the animals on the car. After milking, the car is returned along a parallel path (segment 23) to the starting point where the animals walk off the car in a forward direction onto an unloading

platform. Movement of the animals both onto and off of the car is in a forward or headfirst direction and at no time is an animal removed from the car for milking.

A. Claim 32

Applicant urges that Waybright has no "milking stall" as such. In addition, Claim 32 is amended to recite the step of "moving the animal from the transport cart and into the unoccupied milking stall". In Waybright, the animal is not removed from the car 22 for milking as now claimed so the rejection is traversed.

The rejection of dependent claims 33, 34, and 36-38 should be traversed for the same reasons as noted above (Claim 35 is cancelled). Further it is noted with respect to dependent Claim 33 that the reference has its release area (16) located some distance from the milk station 36 rather than "adjacent the plurality of milking stalls as claimed. With respect to dependent Claims 38 and 41, the claims call for "rearwardly loading the animal into the milking stall" (Claim 38) and "urging the animal rearwardly into the milking stall" (Claim 41) whereas in the reference there is no movement into a "milking stall" *per* se and the movement of the animals both onto and off of the car 22 is in a forward direction.

B. Claim 42

Independent Claim 42 distinguishes from Waybright. On the one hand the reference has no "milking stall" *per se* (the animals being milked while on the car 22). On the other hand, if the car 22 is considered a "milking stall", then there is no "transport cart translatable relative to the milking stall". In addition, Claim 42 has been amended and now recites as a positive element "a milking stall to receive an animal to be milked from a transport cart, the milking stall having an animal ingress/egress end" and a "cart translatable relative to the milking stall between a first position aligned with the ingress/egress end of the milking stall and a second position spaced from the milking stall". Such a milking stall is not seen in the reference.

Since the rejection with respect to Claim 42 is traversed, the rejection of dependent Claims 43-45, 47 and 48 is traversed for the same reasons. In addition, and with respect to dependent Claims 43-45, the reference has no "milking stall" as set out in

Claim 42 so it does not disclose an "ingress/egress gate connected to the milking stall". With respect to Claim 47 Waybright has no disclosure of a milking stall having "a closed end opposite the ingress/egress end and further comprising an operator pit adjacent the closed end". Nor does the reference disclose "a released area adjacent the ingress/egress end" of the milking stall as set out in Claim 48.

4. Claims 4, 6 and 7 stand rejected under 35 U.S.C. 103 (a) as being unpatentable over Nelson in view of van der Lely (US 5, 771, 837). Nelson is discussed above. The patent to van der Lely discloses a milking system wherein the animals move in a forward or headfirst direction into a milking stall. At the milking stall the milking apparatus is automatically connected to the animal and after milking the animal is moved in a headfirst direction out of the milking stall.

Claim 4 includes the limitations of Claim 1 that, as amended, recites "passing the animal rearward through an ingress/egress end" of a milking stall and then removing the animal from the stall by passing it "forward through the ingress/egress end". As noted above Nelson does not disclose movement of an animal through the same ingress/egress end for both loading and unloading nor does Nelson make such a method obvious. While van der Lely may disclose use of a milking robot, the use of the robot involves movement of the animal in a forward direction both into and out of the milking stall so the combination still falls short of the invention as claimed. The same is true for dependent claims 6 and 7. Accordingly, the rejection of Claims 4, 6 and 7 is traversed.

5. Claims 5, 12-14, 16, 19 and 21-27 stand rejected under 35 U.S.C. 103 (a) as being unpatentable over Nelson in view of Waybright. Both references are discussed above. In making this rejection, the Examiner apparently has relied upon hindsight analysis when combining the references and has merely selected certain teachings from each reference while ignoring others. There is nothing in either reference to suggest the proposed combination. For example, Waybright uses a movable car in the context of milking the animals on the cart. There is nothing in either reference to suggest moving the animals off of the cart and into a milking stall for milking.

A. Claim 5

Claim 5 depends from Claim 1 and adds the method step of "loading the animal to be milked onto a transport cart and rearwardly loading the animal from the transport cart into the one of the plurality of milking stalls".

Waybright is cited as disclosing unloading an animal from a movable cart into the milking stall. However, as noted above, the Examiner is in error in that Waybright does not disclose unloading an animal from a cart into a milking stall. In Waybright, the cart pulls into a milking station and the animal is milked while it remains on the cart. Accordingly there is no rearwardly unloading into a milking stall as now recited in Claim 5 (see Column 6,line 63) and the combination proposed by the Examiner falls short of the invention as claimed.

B. Claim 12

Independent Claim 12 is distinguished in that the claim calls for the steps of "rearwardly loading the animal into a milking stall from a moveable transport cart" and "forwardly unloading the animal from the milking stall directly into a common released area". While Waybright may disclose use of a cart to move animals, it certainly does not disclose unloading the animal into a milking stall from the cart. In fact there is a contrary teaching of not moving the animal from the cart for milking. Accordingly, the combination proposed by the Examiner is still missing critical elements of Claim 12 and cannot obviate the invention.

Claims that depend from Claim 12 namely Claims 13, 14, 16, 19 and 21 are distinguished in the same manner as Claim 12. In addition it is clear from the context of the specification that in Applicant's invention the animal is passed tail first into the milking stall. Claim 14 is amended to clarify that this is the case and now reads, "passing the animal tail first...through an ingress/egress gate upon rearwardly loading the animal into the milking stall". The Examiner refers to Nelson element 20 as being an ingress/egress gate. Even if element is considered to be a "gate" the tail of the animal does not pass through this "gate" on loading.

C. Claim 22

Independent Claim 22 recites "loading" the animal onto a cart, "translating the transport cart to align it with an unoccupied milking stall" and "rearwardly loading the animal into the unoccupied milking stall from the transport cart". As noted above, Waybright does not disclose moving an animal from the car for purposes of loading it into a milking stall. The exact opposite is shown to be the case so the combination proposed by the Examiner would still fall short of the invention as claimed.

Dependent Claims 23-27 are distinguished in the same manner as Claim 22. In addition Claim 23 has a cart movable "transverse to the longitudinal dimension of the milking stall" whereas the car of Waybright moves parallel to the long axis of the milking station. It is not seen how this can be ignored when attempting to combine the Waybright disclosure with that of Nelson.

6. Claim 10 stands rejected under 35 U.S.C. 103 (a) as being unpatentable over Nelson in view of Braum (US 4, 763, 605). Nelson is discussed above. Braum discloses putting an operator onto a movable platform and then moving the operator to the animal.

Claim 10 includes all the limitations of Claim 1 and therefore includes the step of "rearwardly loading the animal" into a milking stall "through an ingress/egress end of the stall". The addition of the movable platform of Braum to Nelson would still lack this feature in that the animals in Braum are loaded head first into the milking stall.

7. Claims 15, 17, 18 and 29-31 stand rejected under 35 U.S.C. 103 (a) as being unpatentable over Nelson in view of Waybright and further in view of van der Lely ('837). All these references are discussed above. Claims 15, 17 and 18 depend from Claim 12 and Claims 29-31 depend from Claim 22. As the dependent claims include all the limitation of Claims 12 and 22 the arguments noted above at paragraph 5 with respect to Claims 12 and 22 apply equally to the dependent Claims 15, 17 18 and 29-31.

8. Claims 20 and 28 stand rejected under 35 U.S.C. 103 (a) as being unpatentable over Nelson in view of Waybright and further in view of Braum. These references all are discussed hereinabove. Claims 20 and 28 include all the limitations of their respective

independent Claims 12 and 22 and therefore are distinguished as noted hereinabove at paragraphs 5B and 5C.

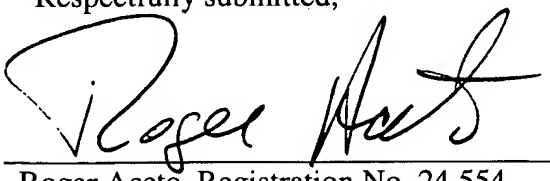
9. Claims 34, 39, 40, 49 and 50 stand rejected under 35 U.S.C. 103 (a) as being unpatentable over Waybright in view of von der Lely ('837) These references are discussed above. Dependent Claims 34, 39 and 40 all include the Claim 32 method step of "moving the animal from the transport cart and into the unoccupied milking stall". Such a moving step is neither disclosed nor made obvious by Waybright. Dependent Claims 49 and 50 include the Claim 42 limitation of "a milking stall to receive an animal to be milked from a transport cart, the milking stall having an animal ingress/egress end" that is not disclosed nor made obvious by Waybright.

10. Claim 46 stands rejected under 35 U.S.C. 103 (a) as being unpatentable over Waybright. As Waybright does not disclose a milking stall *per se* that has an ingress/egress end as claimed, it cannot have a gate at such end that rotates about a vertical axis nor render such a gate obvious.

11. Claim 51 stands rejected under 35 U.S.C. 103 (a) as being unpatentable over Waybright in view of Braum. Claim 52 includes all the limitations of Claim 42 and therefore can be distinguished for the reasons set out above at paragraph 3B. In particular the proposed combination would still lack the milking stall and cart as separable components wherein the milking stall receives "an animal to be milked from a transport cart".

In view of the above amendments and comments, Applicant considers that the claims remaining in the case are in condition for allowance, which action is respectfully requested.

Respectfully submitted,



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